CONTENTS

Tectonophysics Volume 140

Special Issue on Seismic Studies of the Continental Lithosphere (edited by S. Asano and W.D. Mooney)

Preface VII

Crustal structure of the northern part of the Proterozoic Cuddapah basin of India from deep seismic soundings and gravity data
Kaila, K.L., Tewari, H.C., Roy Chowdhury, K., Rao, V.K., Sridhar, A.R. and Mall, D.M. (Hyderabad, India) 1

Simultaneous determination of the three-dimensional crustal structure and hypocenters beneath the Kanto–Tokai District, Japan
Shiya, K., Asano, S., Yoshii, T. (Tokyo, Japan), Ishida, M., (Ibaraki, Japan) and Nishiki, T. (Tokyo, Japan) 13

Results of lithospheric studies from long-range profiles in Siberia
Egorkin, A.V., Zuganov, S.K., Pavlenkova, N.A. and Chernyshev, N.M. (Moscow, U.S.S.R.) 29

The crustal structure of the axis of the Great Valley, California, from seismic refraction measurements
Holbrook, W.S. (Stanford, U.S.A.) and Mooney, W.D. (Menlo Park, Calif., U.S.A.) 49

A study of seismic reflection imaging using microearthquake sources
James, D.E., Clarke, T.J. (Washington, D.C., U.S.A.) and Meyer, R.P. (Madison, Wis., U.S.A.) 65

Contribution of controlled source seismology to the study of seismogenesis: examples from the Italian transitional area
Cassinis, R. and Ranzoni, A. (Milan, Italy) 81

Comparative properties of the wave migration method and the inverse dynamic method in the processing of seismic reflection data
Alekseev, A.S. and Tsibulčik, G.M. (Novosibirsk, U.S.S.R.) 93

Lithospheric studies based on array analysis of P-coda and microseisms
Nikolaev, A.V. and Troitsky, P.A. (Moscow, U.S.S.R.) 103

Seismic velocity structure and gravity anomalies: a comparison
Tomoda, Y. and Fujimoto, H. (Tokyo, Japan) 115

Research Papers

Tectonic collision processes after plate rupture
Price, N.J. and Audley-Charles, M.G. (London, Great Britain) 121

Precursory activity in seismic belts containing the focal region of forthcoming large intraplate earthquakes
Yoshida, A. (Ibaraki, Japan) 131

The seismic travel-time drop in the Charlevoix region from 1979 to 1980: evidence for aligned saturated cracks in the crust
Kirsch, R., Lambert, A. and Buchbinder, G.G.R. (Ottawa, Ont., Canada) 145

Paleozoic and Lower Mesozoic magmas from the eastern Klamath Mountains (North California) and the geodynamic evolution of northwestern America
Lapierre, H., Brouxel, M. (Vandoeuvre-lès-Nancy, France), Albarede, F. (Vandoeuvre-lès-Nancy and Nancy, France), Coulon, C. (Marseille, France), Lecuyer, C., Martin, P. (Vandoeuvre-lès-Nancy, France), Mascle, G. (Grenoble, France) and Rouer, O. (Vandoeuvre-lès-Nancy, France) 155

Paleomagnetism of Permo-Triassic Redbeds from the Asturias and Cantabric Chain (northern Spain): evidence for strong lower Tertiary remagnetizations
Schott, J.J. and Peres, A. (Strasbourg, France) 179

Deep crustal extensional faulting in the Ivrea Zone of Northern Italy
Brodie, K.H. and Rutter, E.H. (London, Great Britain) 193

Superpositional patterns along the continental margin of the southeastern Mediterranean: a review
Mart, Y. (Haifa, Israel) 213

Proterozoic deformation of the East Saharan Craton in Southeast Libya, South Egypt and North Sudan
Schandelmeier, H., Richter, A. and Harms, U. (Berlin, F.R.G.) 233

On the interpretation of the distinctive pattern of geomagnetic induction observed in northwest India
Chamalaun, F.H. (Bedford Park, S.A., Australia), Prasad, S.N. (Hyderabad, India), Lilley, F.E.M. (Canberra, A.C.T., Australia), Srivastava, B.J. (Hyderabad, India), Singh, B.P. and Arora, B.R. (Bombay, India) 247

Geothermal studies in the Hyderabad granitic region and the crustal thermal structure of the Southern Indian Shield
Gupta, M.L., Sharma, S.R., Sundar, A. and Singh, S.B. (Hyderabad, India) 257
Crustal structure of the outer Banda arc: new free-air gravity evidence
McBride, J.H. and Karig, D.E. (Ithaca, N.Y., U.S.A.) 265
Tectonic setting of Cambrian rifting, volcanism and ophiolite formation in western Tasmania
Varne, R. (Hobart, Tas., Australia) and Foden, J.D. (Adelaide, S.A., Australia) 275
Deformation mechanisms in a high-temperature quartz–feldspar mylonite: evidence for superplastic flow in the lower continental crust
Behrmann, J.H. (Giessen, F.R.G.) and Mainprice, D. (Montpellier, France) 297
Textural evolution of synthetic anhydrite–halite mylonites
Ross, J.V., Bauer, S.J. and Hansen, F.D. (College Station, Tex., U.S.A.) 307

Letter Section
Stick-slip model for kink band formation in shear zones and faults
Williams, H.R. (Toronto, Ont., Canada) 327

Book Reviews
Explosive Volcanism: Inception, Evolution, and Hazards by F.R. Boyd, Jr. (panel chairman)—F.M. Bullard 333
Magmatism at a Plate Edge: the Peruvian Andes by W.S. Pitcher, M.P. Atherton, E.J. Cobbing and R.D. Beckinsale (Editors)—W. Hildreth 335

Announcements 341